

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A method for the determination of the resistance of cells versus the action of an active substance comprising:

(i) providing a sample containing cells exposed or having been exposed to said active substance,

(ii) analyzing a gene expression pattern of said cells on a micro-array, said microarray comprising on specific locations thereon capture probes for specific detection and quantification of 49 human at least 5 ATP binding cassette (ABC) transporters selected from the ABC transporter subfamilies A, B, C, D, E, F and G, wherein said microarray contains capture probes to at least 5 ABC transporter subfamilies, and wherein said microarray is a low density microarray containing consisting of capture probes for the detection of up to 1000 3000 genes,

wherein a change of the gene expression of said at least 5 out of said 49 ABC transporters by a factor of at least about 1.5 as compared to a reference is indicative of the development and/or existence of resistance of said cells to the substance.

2. (Currently amended) The method of claim 1, wherein said analyzing of gene expression pattern is for at least 5, 10, 39 and 49 ABC transporters selected from those listed in Table 1.

3. (Cancelled) The method of claim 1, wherein said at least 5 genes of the ABC transporter family are selected from the genes provided in Table 1.

4. (Original) The method of claim 1, wherein said resistance of cells is resistance of cells from a patient to the chemotherapy by a given drug.

5. (Original) The method of any one of claim 1, wherein said drug is selected from Table 3.

6. (Original) The method of claim 1, wherein said cells are incubated in the presence of said drug.

7. (Previously presented) The method of claim 6, wherein the cells are derived from a patient and wherein said method is designed for the determination of a potential active drug for the patient treatment.

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8. (Currently amended) The method of any one of claims claim 1, 2, or 3, further comprising determining an activity of said drug against said cells.

9. (Currently amended) The method of any one of claims claim 1, 2, or 3, further comprising selecting of an active drug for patient treatment.

10. (Currently amended) A method for monitoring a patient treated with a drug for chemotherapy, comprising the method of claim any one of claims 1, 2, or 3, wherein said drug is for chemotherapy.

11. (Original) The method of claim 1, wherein the micro-array contains at least one gene selected from Kir6.1, Kir6.2 and IMPT.

12. (Previously presented) The method of claim 1, wherein said sample containing cells is from acute myeloid leukemia.

13. (Original) The method of claim 1, wherein said sample containing cells is from acute lymphocytic leukemia.

14. (Original) The method of claim 1, wherein said sample containing cells is from solid tumors.

15. (Original) The method of claim 1, wherein said capture probes are single-stranded nucleotides

16. (Original) The method of claim 1, wherein each one specific location gives the quantification of one ABC transporters gene.

17. (Withdrawn) A kit, comprising an array with capture probes located at specific locations for the detection and quantification of the gene expression of at least 5 ABC transporters.